

IN THE CLAIMS

1. (Currently Amended) A self-leveling and balancing vehicle comprising:

a moving and driving mechanism including two longitudinal moving seats formed at ~~[[its]]~~ two sides thereof, a connecting frame extending to ~~connect~~ and connecting said longitudinal moving seats, and two sector gears respectively installed on said two longitudinal moving seats ~~respectively~~;

a driving motor fixed under the top of said connecting frame, the driving motor having a driving shaft extending to said two sector gears;

~~a level sensor installed on said connecting frame;~~

two level driving gears ~~being~~ installed on two ends of said driving shaft and engaged with said two sector gears;

a balance driving gear box ~~being~~ installed on said driving shaft, the balance driving gear box having an output shaft extending to ~~locate at~~ said connecting frame ~~and can be rotated freely for free rotation, and~~ two driven gears, each driven gear being installed on each of two ends of said output shaft;

a base including two guiding rails or guiding grooves ~~paralleled~~ disposed in parallel with ~~moving direction~~ a longitudinal axis of the vehicle, said longitudinal moving seats ~~can be~~ mounted on the two guiding rails or guiding grooves ~~respectively~~, further two racks ~~being~~ fixed between and ~~paralleled~~ disposed in parallel with the two guiding rails or guiding grooves, the driven gears on said output shaft ~~being~~ are engaged with the two racks; and wherein

~~[[once]]~~ when the vehicle is running up or down a slope, the ~~level sensor can~~ start the driving motor ~~automatically to drive~~ drives the driving shaft to ~~[[make]]~~ cause the level driving gears ~~[[can]]~~ to be rotated along the sector gears to ~~adjust the~~ dispose a chair or carry platform on the connecting frame to a level position, ~~meanwhile, and~~ the two driven gears installed on the output shaft of the driving gear box ~~can be~~ are caused to be rotated reversely with the driving shaft and moved forward or backward along the racks to ~~[[make]]~~ cause the moving and driving mechanism to move simultaneously along the guiding rails or guiding grooves to a balance position.

2. (Currently Amended) A self-leveling and balancing vehicle as claimed in claim 1, wherein each longitudinal moving seat ~~[[have]]~~ has a sliding groove or a sliding rail ~~which can be~~ mounted respectively on the guiding rails or guiding ~~groove~~ grooves on the base.

3. (Currently Amended) A self-leveling and balancing vehicle as claimed in claim 2, wherein the sliding grooves or rails mounted on the guiding rails or grooves ~~can be~~ form a dovetail joint.

4. (Currently Amended) A self-leveling and balancing vehicle as claimed in claim 1, wherein the balance driving gear box ~~[[have]]~~ includes a driving gear, two ~~medium~~ intermediate gears and a driven gear engaged with each other, the driving gear ~~being~~ installed on the driving shaft of the driving motor and the driven gear ~~being~~ installed on the output shaft.

5. (Currently Amended) A self-leveling and balancing vehicle as claimed in claim 1, wherein the top of the connecting frame ~~[[have]]~~ includes a chair or platform.

6. (Currently Amended) A self-leveling and balancing vehicle as claimed in claim 1, wherein the connecting frame includes two sides, each side is formed into of a triangular supporting shape, ~~[[the]]~~ a lower part of ~~two sides of said connecting frame~~ each side having a first locating hole ~~respectively~~, two ends of the output shaft of the balance driving gear box ~~can be installed in the first locating holes and rotated freely for~~ free rotation, ~~[[the]]~~ an upper part of ~~two sides of said connecting frame~~ each side having a second locating hole ~~respectively aligned with said first locating hole, and~~ two ends of the driving shaft of the driving motor ~~can be installed in the second~~ locating holes ~~and rotated freely for free rotation~~.

7. (Currently Amended) A self-leveling and balancing vehicle as claimed in claim 1, wherein the base ~~[[have]]~~ includes a top plate, a bottom plate and three supporting ~~[[post]]~~ posts installed between the top plate and said bottom plate, a top end of each ~~[[said]]~~ supporting post ~~[[being]]~~ is pivoted on the top plate and ~~[[the]]~~ a bottom end of each supporting post is ~~[[being]]~~ fixed on the bottom plate, ~~each supporting post being equipped with a compression spring.~~